

Listing of Claims:

Claims 1-11 (Cancelled)

12. (Currently Amended) A method for depositing a phosphor pattern on an article using a direct-write tool, comprising the steps of:

providing a particulate suspension of phosphor particles having a viscosity of not greater than 30 centipoise, wherein said particles are substantially spherical and have a weight average particle size of from about 0.1 μm to about 20 μm ; and

depositing said particulate suspension on said article using a direct-write tool that is controllable over an x-y grid.

13. (Currently Amended) A method as recited in Claim 12, wherein said average particle size is from about 0.3 μm to about 10 μm .

14. (Currently Amended) A method as recited in Claim 12, wherein said particles comprise metal oxide phosphor particles.

15. (Currently Amended) A method as recited in Claim 12, wherein said particles comprise metal sulfide phosphor particles.

16. (Currently Amended) A method as recited in Claim 12, wherein said article is a panel for a flat panel display.

17. (Currently Amended) A method as recited in Claim 12, wherein said phosphor particles have an apparent density of not greater than about 20 percent of the theoretical density of the phosphor compound.

18. (Currently Amended) A method as recited in Claim 12, wherein said phosphor particles comprise hollow particles.

19. (Currently Amended) A method as recited in Claim 12, wherein said direct-write tool is selected from one of an automated syringe and an ink-jet device.

20. (Cancelled herein)

Claims 21-23. (Cancelled)

24. (Currently Amended) A method for forming a flat panel display, comprising the steps of:

a) providing a flat panel display screen;

b) depositing at least first phosphor particles on said display screen, wherein said step of depositing comprises using a direct-write tool controllable over

an x-y grid to deposit a liquid suspension having a viscosity of not greater than 30 centipoise and comprising said first phosphor particles in predetermined pixel regions wherein said first phosphor particles have an average size of not greater than about 20 μm and a substantially spherical morphology.

25. (Currently Amended) A method as recited in Claim ~~42~~19, wherein said phosphor particles have a size distribution wherein at least about 80 weight percent of said phosphor particles are not larger than twice said average particle size.

26. (Currently Amended) A method as recited in Claim ~~42~~19, wherein said phosphor particles have a size distribution wherein at least about 90 weight percent of said phosphor particles are not larger than twice said average particle size.

27. (Currently Amended) A method as recited in Claim ~~42~~19, wherein said particulate suspension comprises a water-based liquid vehicle.

28. (Cancelled herein)

29. (Currently Amended) A method as recited in Claim ~~42~~19, wherein said phosphor pattern comprises predetermined pixel regions.

30. (Currently Amended) A method as recited in Claim ~~24~~34, wherein said flat panel display is a field emission display.

31. (Currently Amended) A method as recited in Claim ~~24~~34, wherein said flat panel display is a plasma display panel.

32. (Currently Amended) A method as recited in Claim ~~24~~34, wherein said phosphor particles have an average size of from about 0.3 μm to about 10 μm .

33. (Currently Amended) A method as recited in Claim ~~24~~34, further comprising the step of depositing at least second phosphor particles on said display screen, wherein said step of depositing comprises using said direct-write tool controllable over an x-y grid to deposit said second phosphor particles in said predetermined pixel regions wherein said second phosphor particles have an average size of not greater than about 20 μm and a substantially spherical morphology and have a composition different than said first phosphor particles.

34. (Currently Amended) A method as recited in Claim 24, wherein said direct-write tool is selected from one of an ink-jet device and an automated syringe.

35. (Currently Amended) A method as recited in Claim 2434, wherein said phosphor particles comprise metal oxide phosphor particles.

36. (Currently Amended) A method as recited in Claim 2434, wherein said phosphor particles comprise metal sulfide phosphor particles.

37. (Currently Amended) A method as recited in Claim 2434, wherein said phosphor particles have a size distribution wherein at least about 80 weight percent of said phosphor particles are not larger than twice said average particle size.

38. (Currently Amended) A method as recited in Claim 2434, wherein said phosphor particles have a size distribution wherein at least about 90 weight percent of said phosphor particles are not larger than twice said average particle size.

39. (New) A method as recited in Claim 19 wherein said direct-write tool is an automated syringe.

40. (New) A method as recited in Claim 34, wherein said direct-write tool is an automated syringe.

41. (New) A method for depositing a phosphor pattern on an article using an ink-jet device, the method comprising the steps of:

providing a particulate suspension of phosphor particles having a viscosity of not greater than 30 centipoise, wherein said phosphor particles are substantially spherical and have a weight average particle size of from about 0.1 μm to about 20 μm ; and

depositing said particulate suspension on said article using an ink-jet device that is controllable over an x-y grid.

42. (New) A method for forming a flat panel display, comprising the steps of:

a) providing a flat panel display screen; and

b) depositing at least first phosphor particles on said display screen,

wherein said step of depositing comprises using a ink-jet device controllable over an x-y grid to deposit a liquid suspension in predetermined pixel regions, said liquid suspension having a viscosity of not greater than 30 centipoise and comprising said first phosphor particles, wherein said first phosphor particles have an average size of not greater than about 20 μm and a substantially spherical morphology.